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ABSTRACT

This study addressed issues of communication apprehension and adaptability by examining relationships between reticence and cognitive communication competence, including differences between gender and age groups. The methodology included participant self-ranking according to a six-dimensional reticence skill system, and ranking according to the 22-point cognitive communication competence scale, which measures cognitive involvement before, during, and after communication. Results indicated that: (1) twenty-two high school students were identified as high reticence, 43 middle, and 25 low reticence; (2) significant differences occurred among reticence groups on planning, modeling, reflection, and consequence cognition scores; (3) no significant differences occurred among gender or age groups; (4) high anxiety students are also reticent about knowledge, timing, organization, delivery, and memory; (5) twenty-five percent of high school students hesitate to engage in social interaction; (6) the more knowledgeable the student the more likely the transition from observer to participant; and (7) reticent students do not visualize communication as a dyadic communication process and consequently lack social interaction skills. Additional research should utilize the reticence and cognitive communication instruments, and longitudinal studies should examine potential reticence decreases. Appendixes contain sample reticence scales and assessment forms. (Contains 19 references and 4 tables.) (EF)

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An Investigation of High School Students' Perceptions of Reticence and Cognitive Communication Competence

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Abstract

The results indicate that significant positive relationships exist between all reticence variables and between all cognitive communication competence variables ($p < .01$). Significant relationship exist between anxiety and presence cognition, between knowledge and modeling cognition, between organization and presence cognition, and between delivery and modeling cognition ($p < .01$). Post hoc analyses reveal significant differences between high and low reticent groups in rating planning cognition, modeling cognition, reflection cognition and consequence cognition ($p < .05$). These results are discussed in this paper.

Over the past 30 years the reticence construct has undergone an evolution. Initially, Phillips (1965) coined the term "reticent" to refer to the notion that there are people who have difficulty communicating across a range of situations . He defined reticence as a "personality-based, anxiety disorder." In 1977 he shifted the definition to include it as a problem of inadequate communication skills. Later Phillips (1984) indicated: "When people avoid communication because they believe they will lose more by talking than by remaining silent, we refer to it as reticence." The most recent work of Phillips (1991; Kelly, Phillips, and Keaten, 1995) delineates the nature of these skills deficiencies."

The reticence construct assumes the skills deficiencies defining the problem correspond to the rhetorical canons of invention, disposition, style, delivery, and memory. The significance of the construct is made apparent by the subsequent development of cognate concept of communication apprehension (McCroskey, 1970 and 1984), unwillingness to communicate (Burgoon, 1976), and conversational skills (Spitzberg and Hunt, 1987). Based on a review of Phillips' research, Keaten, Kelly, and Finch (1997) developed the reticence scale. The investigators generated items focusing on the social conversation context, which McCroskey (1984) termed a generalized context measure. The rationale for referring to the social conversation that those who have trouble in this context usually have difficulty in other contexts. The authors generated four items for six areas: anxiety, knowledge, timing, organization, delivery and memory.

Specifically, the Keaten, Kelly, and Finch study (1997) was designed to test the following hypotheses:

1. The Reticence Scale is moderately and positively related to the PRCA-24;

2. The Reticence Scale is moderately and negatively related to Conversational Skills Rating Scale (CSRS);

3. The Reticence Scale is moderately and negatively related to the WTC.

The results indicate that there were moderate, positive correlations between the Reticence Scale and the PRCA -24 variables except public discussion, which obtained a low correlation. Moreover, moderate negative relationships existed between the Reticence Scale and both the Conversational Skills Rating Scale and Willingness to Communicate. Overall, the relationships accounted for less than 50 percent of the variance.

Much research has been completed on the psycho-motor and to a more limited extent the affective domain of communication competence (e.g. communication apprehension and willingness to communicate). Duran and Spitzberg (1995) indicate that cognitive communication competence is defined as the ability to perceive and anticipate situation variables that have the potential to influence one's communication choices, the ability to select behaviors adaptive to those situational variables and anticipate the consequences of those behavioral choices; the ability to perceive how the other is responding to one's communication choices and general reflection about performance.

Other research by Phillips (1984) focused on cognitive communication competence. Spitzberg and Cupach (1984) defined communication competence as "an individual's ability to adapt effectively to the surrounding environment over time." They summarized the fundamental competence as follow: "the sine qua non of fundamental competence in cross situational adaptability. . . theories are concerned with the acquisition and development of adaptability and its cognitive precursors." Duran and Spitzberg (1995) concluded that the cognitive

dimensions of competence is a set of mental processes that include the following:

> The ability to perceive situational variables that have the potential to influence one's communication choices (e.g. , who will be there, where it is, what people will be talking about , etc.); the ability to select behaviors adaptive to those situational variables and anticipate the consequences of those behavior choices; the ability to perceive how the other is responding to one's communication choices and alter those choices to refine one behavioral repertoire for future encounters; and, general reflection about performances. Thus, the cognitive dimensions of competence involves several important mental activities of a proactive and reflective nature.

Previous research by Greene (1984), Spitzberg and Cupach (1984), Cody and McLaughlin (1985), and Spitzberg and Brunner (1991) were used by Duran and Spitzberg to reach the above conclusions.

Based on a review of previous cognitive communication competence, as well as assessing the validity of a measure of communication competence, Duran, Kelly, Schwager, Carone, and Stevens, (1993), Duran and Spitzberg (1995) revised the original instrument to include three constructs: communication knowledge (Spitzberg, 1990), interaction involvement (Ceegala, 1981), and self- monitoring (Snyder, 1974, 1979) developed and assessed the validity a measure of cognitive communication competence. Each construct has high reliability and validity. Research by Sptizberg (1990) found that self-monitoring was significantly related to communication knowledge (r= .62); knowledge was significantly related to ability to modify self-presentation (r= .59) and sensitivity to expressive behavior (r=. 55). They concluded that cognitive communication competence is conceptualized as an individual's ability to think about communication contexts prior to, during, and after engaging in social interactions. They tested the following hypotheses:

1. Cognitive communication competence is positively related to communication knowledge.

2. Cognitive communication competence is positively related to interaction involvement.

3. Cognitive communication competence is positively related to self-monitoring.

The results of the factor analysis produced the following five factors that accounted for 57 percent of the variance with reliabilities ranging from .68 to .86: planning cognitions, presence cognitions, modeling cognitions, reflection cognitions, and consequences cognitions. The three hypotheses were accepted.

No research has been completed to determine the relationships between the reticence and cognitive dimensions of competence. That is this is an exploratory study designed to determine the relationship between and among reticence variable, between and among cognitive communication competence variables, between the two sets of variables measured across the same subjects, and differences between gender groups and among age groups on both reticence and communication variables. Below is a list of the hypotheses:

Research Questions:

1. What are the relationships between and among reticence variables?

2. What are the relationships between and among cognitive communication variables?

3. What are the relationships between reticence variables and cognitive communication variables?

4. What differences exist between gender group in rating the dimensions of reticence variables?

5. What differences exist between age groups in rating the dimensions of cognitive communication competence variables?

INSTRUMENTS

a. Reticence

Kelly, Keaten, and Begnal (l992) develop the reticence Skill which focuses on how individuals assess their feelings and skills in social settings. It consists of six dimensions: (l) feelings and anxiety, (2) knowledge of communication topics, (3) timing skills, (4) organization of thoughts, (5) delivery skills, and (6) memory skills. Participants used a 6-point likert scale to measure to rate their level of agreement with each statement. Scores for each dimension range from 1 to 21. The total score range from 6 to l26. The overall reliability of the total scale was .95. with the six dimensions reliability coefficients ranging from .82 to 92 (See Appendix A).

b. Cognitive Communication Competence Scale

This is a 22-item scale designed to measure planning cognitions, modeling cognitions, presence cognitions, reflection cognition and consequence cognitions (See appendix B). Five factors accounted for 57 of the variance. The five dimensions are summarized below:

(1) Planning cognition reflects the anticipation, mental rehearsal and monitoring of topics of conversation. A sample item: "Before a conversation, I think about what I am going to say."

(2) Presence cognitions reflect an awareness of how the other is reacting to a conversation. A sample item is: "During a conversation I am aware of when it is time to change the topic. "

(3) Modeling cognitions reflect an awareness of contextual variables that provide information that serves to inform interaction choices. A sample item is: "When I first enter a new situation, I watch who is talking with whom."

(4) Reflection cognitions tap a process of reflecting upon a performance with the objective to improve one self-presentation. A sample item is: "After a conversation, I think about what I said."

(5) Consequence cognitions reflect a general awareness and concern for the effects of one's communication performance. A sample item is: " Generally I think about the effects of my communication" (see Duran and Spitzberg, 1995). See Appendix B

RESULTS

The results indicate that 90 (42 males and 48 females) students from a large midwestern high school completed the survey instruments during the spring semester 1999. The results, reported in Table 1, reveal that significant correlations ($p < .001$) existed among all reticence variables. Most relationships account for 60% of the variance. Likewise, significant relationships ($p < .01$) existed among all cognitive communication variables. No significant differences occurred between gender groups and among age groups in rating dependent measures. Based on these results, post hoc analyses were completed to determine if significant differences ($p < .05$) existed among reticence groups in terms of rating cognitive communication competence variables. Composite reticence scores, ranging between 24 and 144, were used to place all participants into high, medium and low reticence groups. Specifically, students scoring (97.17) one standard deviation above the mean were classified into the high reticence group; students scoring(52.41) one standard deviation below the mean were classified into the low reticence group, while students scoring (53 and 97)

between one standard deviation below the mean and one standard deviation above the mean were classified into the middle reticence group. The results indicate that 22 students were classified into the high reticence groups and 25 students were classified into the low group, while 43 students were classified into the middle group. The results indicate that significant differences occurred among reticence groups on planning cognition score, modeling cognition scores, reflection cognition scores, and consequence cognition scores ($p < .01$). Based on these results the Scheffe procedure were completed to determine differences between high and middle groups, high and low groups, and middle and low groups. The results, reported in Table 4 indicate that significant differences occurred between the high and low reticence groups in rating planning cognition, modeling cognition, reflection cognition, and consequence cognition scores ($p < .05$). Significant differences also occurred between high and middle group on modeling cognition scores.

Discussion

An interpretation of the results seem to indicate highly significant relationship among all reticence variables That is high school students who are high in anxiety are also reticent about knowledge, timing, organization, delivery, and memory. Unlike the Penn State study (Kelly, et al, 1994), where anxiety had the highest mean rating, in this study timing ($X= 13.68$) and delivery ($X= 13.13$) had the highest mean ratings. This seems to indicate that approximately 25 percent of high school students hesitate to engage in social interaction and when they do they feel that they muddle words, stumble over words, and don't speak fluently.

An interpretation of the cognitive communication competence results indicate that reflective cognition scores (X= 18. 82) and planning cognition scores (X= 16) are rated the highest. This indicates that high school students are most concerned about before and after communication.

The relationships between sets of variables show that the strongest significant relationship exist between delivery and modeling cognition (r= .53), accounting for 25 percent of the variance. This seems to make sense as the highly apprehensive student is highly reticent in the sender role, but is more relaxed in the receiver role. Likewise, the relationship between knowledge and modeling cognition (-.39), accounting for 16 percent of the variance. This seems to indicate that the more knowledgeable a student is the more likely he/she is to move from an observer role to a participant role.

An interpretation of the post hoc analyses seems to show that wide significant differences exist between the high and low reticence groups in rating cognition variables. For example, the high reticence student doesn't plan, isn't aware when it is time to change topics, doesn't reflect upon the communication, and is not aware of his/communication performance.

Overall, the results suggest that high school student who are reticent do not visualize communication as a dyadic communication process, and, as a result, lack social interaction skills. The wide differences between high and low reticent groups suggest that high school students might benefit my participating in a program similar to the Penn State Reticence Program.

Future research should be completed utilizing these two instruments. For example, a large group of participants should complete the instruments. A sample of students could complete the instrument in the junior high and senior

high levels. In addition, longitudinal studies might be completed to discover if reticence decreases as students move from one educational level to another. Other research should be done to try to identify differences between high and low reticent groups and the cognitive communication competence variables.

Table 1
Relationships among Reticence Variables

	A	K	T	O	D	M
A		.82	.84	.87	,88	.9
K			.76	.81	.80	.81
T				,87	.87	.85
O					.91	.88
D						.93
M						

p < .001 for all relationships
A= Anxiety
K= Knowledge
T= Timing
O= Organization
D= Delivery
M= Memory

Table 2
Relationships among Cognitive Communication Competence Variables

	Variables				
	PC	MC	PreC	RC	CC
PC		.48	.50	.50	.57
MC			.43	.60	.55
PerC				.29	.34
RC					.62
CC					

PC= Planning Cognitions
MC= Modeling Cognitions
PerC=Presence Cognitions
RC= Reflection Cognition
CC= Consequence Cognitions
P < .001 for all relationships

Table 3
Relationships between Reticence Variables and
Cognitive Communication Variables

	A	K	T	O	D	M
PC	-.03	-.22*	.07	-.25**	.11	.09
MC	-.08	-.39***	-.05	-14	-.53***	.15
PreC	-.35***	.08	-.15	-.32	-.19*	-.19*
RC	-.01	-.009	.02	-.07	.04	-.03
CC	-.04	-.18	-.03	-.06	.13	.05

* p < .05
** p < .02
*** p < .001

A= Anxiety
K= Knowledge
T= Timing
O= Organization
D= Delivery
M= Memory

PC= Planning Cognitions
MC= Modeling Cognitions
PreC=Presence Cognitions
RC= Reflection Cognitions
CC=Consequence Cognitions

Table 4

Scheffe Results between Reticence Groups and Cognitive Communication Competence Variables

Variables	Levels	P	F
Planning Cognitions	High vs Low	3.97	.05
Modeling Cognitions	High vs Low	4.43	.05
	High vs Moderate	4.27	.05
Reflection Cognitions	High vs Low	4.67	.05
Consequence Cognitions	High vs Low	4.13	.05

Appendix A

Reticence Scale

DIRECTIONS: This assessment instrument is composed of 24 statements concerning your skills as a communicator. Please indicate in the space provided the degree to which each statement applies to you by marking whether you (1) strongly disagree, (2) disagree, (3) mildly disagree, (4) mildly agree, (5) agree, or (6) strongly agree. These statements refer to your communication skills when meeting a stranger at a social gathering. Please work quickly; just record your first impression.

__ 1. I am nervous when talking. (Anxiety)
__ 2. I know what to say. (Knowledge)
__ 3. I wait too long to say what I want to say. (Timing)
__ 4. I organize my thoughts when talking. (Organization)
__ 5. I stumble over my words. (Delivery)
__ 6. I remember what I want to say when talking. (Memory)
__ 7. I am relaxed when talking. (Anxiety)
__ 8. I am unaware of what to say. (Knowledge)
__ 9. I say things at the time I want to say them. (Timing)
__ 10. My thoughts are disorganized. (Organization)
__ 11. I clearly say what I want to say. (Delivery)
__ 12. I forget what I want to say when talking. (Memory)
__ 13. I feel tense when talking. (Anxiety)
__ 14. I know what to discuss. (Knowledge)
__ 15. I hesitate too long to say what I want to say. (Timing)
__ 16. I arrange my thoughts when talking. (Organization)
__ 17. I muddle my words. (Delivery)
__ 18. I recall what I want to say when talking. (Memory)
__ 19. I am comfortable when talking. (Anxiety)
__ 20. I am unfamiliar with what to say. (Knowledge)
__ 21. I say things when I want to say them. (Timing)
__ 22. My thoughts are jumbled. (Organization)
__ 23. I fluently say what I want to say. (Delivery)
__ 24. I lose sight of what I want to say when talking. (Memory)

Scoring Instructions:

Anxiety = 11+Q1+Q13-Q7-Q19
Knowledge = 11+Q8+Q20-Q2-Q14
Timing = 11+Q3+Q15-Q9-Q21
Organization = 11+Q10+Q22-Q4-Q16
Delivery = 11+Q5+Q17-Q11-Q23
Memory = 11+Q12+Q24-Q6-Q18

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Appendix B

Directions: The following are statements about the communication process. Answer each as it relates to what you generally think about concerning social situations. Please indicate the degree to which each statement applies to you by placing the appropriate number (according to the scale below) in the space provided.

5 = Always true of me
4 = Often true of me
3 = Sometimes true of me
2 = Rarely true of me
1 = Never true of me

Planning Cognitions

____ 1. Before a conversation I think about what people might be talking about.
____ 2. Before a conversation I mentally practice what I am going to say.
____ 3. Before a conversation I think about what I going to say.
____ 4. When I first enter a new situation I think about what I am going to talk about.
____ 5. During a conversation I think about what topic to discuss next.

Modeling Cognitions

____ 6. When I first enter a new situation I watch who is talking to whom.
____ 7. When I first enter a new situation I try to "size up" the event.
____ 8. Generally, I study people.
____ 9. Generally, I am aware of people's interests.

Presence Cognitions

____ 10. During a conversation I am aware of when a topic is "going nowhere."
____ 11. During a conversation I am aware of when it is time to change the topic.
____ 12. During a conversation I pay attention to how others are reacting to what I am saying.
____ 13. During a conversation I know if I have said something rude or inappropriate.

Reflection Cognitions

____ 14. After a conversation I think about what the other person thought of me.
____ 15. After a conversation I think about my performance.
____ 16. After a conversation I think about what I said.
____ 17. After a conversation I think about what I could have said.
____ 18. After a conversation I think about what I have said to improve for the next conversation.

Consequence Cognitions

____ 19. Generally, I think about how others might interpret what I say.
____ 20. Generally, I think about the consequences of what I say.
____ 21. Generally, I think about how what I say may affect others.
____ 22. Generally, I think about the effects of my communication.

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REFERENCES

Burgoon, J. K. (1976). "The unwillingness to communicate scale: Development and validation." Communication Monographs, 43, 60-69.

Cegala, D. J. (1981). "Interaction involvement: A cognition dimension of communicative competence. Communication Education, 30, 109-121. Duran R.

Kelly, Schwager, K., Carone, S., and Stevens, S. (1993). "Toward the development of a measure of cognitive communication competence." Paper present at the meeting of the Eastern Communication Association, New Haven, CT.

Cody, M., and McLaughlin, M. (1985). "The situation as a construct in interpersonal communication research." In ML. Knapp & G.R. Miller (Eds.) Handbook of interpersonal communication (pp. 263-312). Beverly Hills: Sage.

Duran R., and Spitzberg, B. (1995). "Toward the development of cognitive communication competence." Communication Quarterly, 43, 259-275.

Greene, J. (1984). "A cognitive approach to human communication: An action assembly theory. " Communication Monographs, 51, 289-306.

Keaton, J., Kelly, L., & Finch, C. (1997). "Development of an instrument to measure reticence." Communication Quarterly, 45, 37-51.

Kelly, L. Keaten, J., & Begnal, C. (1994). "Refinement of a typology of reticent communicators." Paper presented at the annual meeting of the Speech Communication Association, New Orleans.

Kelly, L., Phillips, G.M. & Keaton, J. A. (1995). "Teaching people to speak well: Training and remediation of communication reticence." Speech Communication Series of Applied Communication. Cresskill, N. J. Hampton Press Inc.

BEST COPY AVAILABLE

McCroskey, J. (1970). "Measures of communication-bound anxiety." Speech Monographs, 37, 269-277.

McCroskey, J. (1984). "The communication apprehension perspective." In J. Daly & J. C. McCroskey (Eds.), Avoiding communication: Shyness, reticence, and communication apprehension (pp.13-38). Beverly Hills: Sage.

Phillips, G.M. (1965). "The problem of reticence." Pennsylvania State Annual, 22, 22-38

Phillips, G.M. (1977). "Rhetoritherapy vs. the medical model: Dealing with reticence." Communication Education, 26, 34-43.

Phillips, G.M. (1984). "Reticence: A perspective on social withdraw." In J. A. Daly & J.C. McCroskey(Eds.), Avoiding Communication: Shyness, reticence, and communication (pp. 51-66). Beverly Hills: Sage

Phillips, G.M. (1991). Communication incompetencies: A theory otraiing oral performance behavior. Carbondale, IL: Southern Illinois University Press.

Spitzberg, B. H. and Cupach, W. R. (1984). Interpersonal communication competence. Beverly Hills, CA: Sage.

Snyder, M. (1974). The Self-monitoring of expressive behavior. Journal of Personality and Social Behavior, 30, 526-537.

Snyder, M. (1979). Self-monitoring processes. In L. Berkowitz (Ed.), Advances in experimental psychology (Vol. 12, pp 86-128). New York: Academic Press.

Spitzberg, B. H. and Hunt, H. T. (1987). "The measurement of interpersonal skills in instructional context." Communication Education, 36, 28-45.

Spitzberg, B. H. (1990). "The construct validity of trait-based measures of interpersonal competence." Communication Research Reports. 7, 107-115.

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